

Urban Sanitary District of Tonbridge.



ANNUAL REPORT

ON THE

HEALTH OF THE

Tonbridge Urban Sanitary District,

IN THE YEAR 1900,

BY

JAMES SCOTT TEW, M.D., D.P.H.



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ANNUAL REPORT

ON THE

Health of the Tonbridge Urban Sanitary District

IN THE YEAR 1900.

THE POPULATION of the Tonbridge Urban District was estimated by the method adopted by the Registrar-General to be 10,947 at the middle of 1900, showing an increase of 108 since the middle of 1899.*

The registered BIRTHS amounted to 253, including 133 of males and 120 of females, and giving a BIRTH-RATE of 23·1 per 1,000 of population, as against 27·7 in 1899 and 26·1 in 1898.

The number of DEATHS returned was 143, consisting of 76 of males and 67 of females.

In addition to these, 19 deaths occurred outside the District, amongst persons belonging to it, viz., at the Union Workhouse, Pembury.

The DEATH-RATE was 14·7 per 1,000 of population, as compared with 15·4 and 14·5 in the two previous years.

The INFANT MORTALITY, *i.e.*, the number of deaths of infants under one year of age per 1,000 registered births, was 98, as compared with 116 in 1899 and 128 in 1898.

Of the total 143 deaths, 4 were caused by one or other of the seven principal Zymotic Diseases, viz., 3 by Measles and 1 by Whooping Cough.

The ZYMOTIC DEATH-RATE was 0·3 per 1,000 of population, as compared with 1·1 in 1899 and 1·3 in 1898.

Not a single death was caused by either Small-pox, Scarlet Fever, Diphtheria, Enteric Fever, or Puerperal Fever.

During the year 1900 the birth-rate throughout England and Wales was 28·9 (the lowest on record); the general death-rate 18·3, and the zymotic death-rate 2·00 per 1,000 of population.

* Failing a local Census, this method of estimating the population is generally the most reliable, but for Tonbridge, where the relative proportion of increase in new buildings and immigration has apparently been greater during the period of 1891 to 1900 than from 1881 to 1890, the population will most likely be somewhat under-estimated. This will not, however, materially affect the vital statistics, but will certainly not have the tendency to make them unduly satisfactory.

The rate of mortality amongst infants under one year of age per 1,000 registered births was 154.

It is evident from the above figures that the vital statistics for the year under consideration are most satisfactory, the General Death-rate, the Zymotic Death-rate, and the Infant Mortality being respectively 3.6, 1.7, and 56 below the rates for the country generally.

The continued decline in the Birth-rate is steadily maintained, and in this District the rate per 1,000 is 5.8 below that of England and Wales, taken as a whole.

Notifiable Diseases.

It should be noted that the Infectious Disease (Notification) Extension Act, 1899 (which received the Royal Assent on January 20th, 1899, and came into operation on January 1st, 1900), has made the Infectious Disease (Notification) Act, 1889, compulsory in every Urban, Rural, and Port Sanitary District in England and Wales.

Under these Acts, now cited together as the Infectious Disease (Notification) Acts, 1889 and 1899, 40 cases were reported, as compared with 43 and 35 during the two previous years.

They consisted of 19 cases of Scarlet Fever, 3 cases of Diphtheria, 8 of Enteric Fever, and 10 of Erysipelas.

SMALL-POX.—Not a single case of this disease occurred during the year.

SCARLET FEVER.—Nineteen non-fatal cases were reported during the year (being 5 less than in 1899). They occurred at the following age-periods :—

5—15 years	15—25 years	
17	2	= 19 cases.

The maximum number of cases occurred in April, and no cases were notified in the town during March, May, July, and October. The monthly distribution was as follows :—January, 1 case; February, 3; April, 6; June, 1; August, 3; September, 1; November, 2; December, 2.

The cases were distributed in all quarters of the town, with the exception of Dry Hill Park, thus :—

Vale Road contributed 4, Hadlow Road 3, Lodge Road 3, The Slade 2, with one case each in Yardley Park, St. Margaret's Place, Woodside Road, Norfolk Road, Pot Kiln, Barden Road, and High Street.

Fourteen of the 19 cases were removed to the Isolation Hospital.

DIPHTHERIA.—The town was again very free from this disease, only three cases being recorded, with no deaths. One occurred in Pembury Road in February, one in Vale Road in March, and one in Priory Street in November.

The first was a child aged 10 years, and the other two were adults.

ENTERIC (OR TYPHOID) FEVER.—Eight cases, which all recovered, were notified at the following age-periods:—

5—15 years	15—25 years	25—65 years	
<u>1</u>	<u>3</u>	<u>4</u>	= 8 cases

They occurred in March 2, in April 2, in July 2, in August 1, and in December 1.

Priory Road contributed 3 cases, High Street 2, and Danvers Road, Lavender Hill, and Barden Road each 1.

One case, that from Danvers Road, was removed to the Isolation Hospital for treatment.

There were no insanitary conditions at the infected houses to account for the existence of Typhoid Fever, but there was evidence to show that at least two of the cases in all probability contracted the disease elsewhere.

ERYSIPELAS fell from 14 cases in 1899 to 10 cases in 1900, the ages of the patients varying from 17 to 80 years.

The cases occurred 2 in January, 1 in February, 2 in April, 2 in May, 1 in July, 1 in October, and 1 in November. The last case, that of a man aged 79 years, ended fatally in December.

Non-Notifiable Diseases.

MEASLES was never very prevalent, and caused only 3 deaths, as compared with 8 in 1899. Two took place in the first quarter, and the third in the third quarter of the year, the ages of the patients varying from 9 to 22 months.

WHOOPING-COUGH only caused 1 death in October, that of an infant under one year of age.

DIARRHŒA.—No deaths were attributed to this disease.

INFLUENZA was not prevalent at any time, causing only 3 deaths at the beginning of the year, the patients being aged 14, 58, and 18 years respectively.

Elementary Schools.

The National Schools and the Wesleyan Schools were closed for one week, January 8th to January 15th, on account of the prevalence of Measles, this being the end of the outbreak which occurred during November and December, 1899.

For the remaining part of the year 1900 all the Schools remained open.

Hospital Isolation.

During the year 1900, 15 persons—10 males and 5 females—suffering from infectious disease, were removed to and treated at the Isolation Hospital, Vauxhall Road.

The admissions were as follows:—

April	7 cases	(6 Scarlet Fever and 1 Typhoid Fever)
August	3 cases	(Scarlet Fever)
September . . .	1 case	„ „
November . . .	2 cases	„ „
December . . .	2 „	„ „
<hr style="width: 10%; margin: 5px auto;"/>		
Total	15 cases	

The ages of the patients varied from 5 years to 27 years; the longest stay at the Hospital was 50 days, the shortest 15 days, and the average stay 41 days.

It is satisfactory to note that no deaths occurred at the Hospital during the year.

I must again call attention to the very insufficient washing and cooking accommodation at the Hospital. The present immunity from infectious disease requiring hospital accommodation cannot be expected to last, and if any number of patients are required to be admitted, these wants will seriously affect the working of the Staff.

The Disinfector I long ago showed to be of an antiquated and wasteful type.

General Inspections.

A number of inspections have been made by me during the year—10 of the Sewage Farm and 3 of the Isolation Hospital, in addition to visits to houses where infectious disease had broken out.

I have also taken the opportunity of seeing the condition of sewers where there has been occasion to open them up; from my observations in this direction there are several which require attention, additional flushing and shaft ventilation.

The Bakehouses, Slaughter-houses, and Milkshops are in a satisfactory condition. It may probably be desirable in the near future, particularly considering the large proportion of boys in the town, that the sources of the milk supply should be even more minutely inquired into, even if outside the area of the Urban District.

No cases of overcrowding have come to my knowledge during the year

Notice of each new premises used as a factory has been duly received from the Inspector, and the sanitary condition in each case has been inquired into.

Water Supply.

The Tonbridge Water Company continue to supply the town and District with a plentiful and wholesome supply of water, which has been systematically analysed during the year, both chemically and bacteriologically, the results being satisfactory in every instance with the exception of one in February, when an exceptionally high flood occurred, submerging the lower part of High Street and also the Company's premises.

The water regained its normal purity in about 10 days.

On March 21st an Inquiry was held by the Board of Trade into an application of the Water Company to acquire about 52 acres of land as a protecting area of the water supply. This application was subsequently granted.

The following is an average of the 10 chemical analyses made during the year:—

	Parts per 100,000
Free Ammonia . . . . .	.00
Albuminoid Ammonia . . . . .	.004
Oxygen absorbed in 4 hours at 80° F. . . . .	.006
Total Solids	36
Loss on Ignition	9
Total Hardness	20.1
Permanent ,,	4.8
Chlorine	3.6
Nitrogen as Nitrites	nil
,, Nitrates . . . . .	.306
Poisonous Metals	nil
Alkalinity as CaCO ₃	17.3

The analyses made directly after the flood in February, 1900, are not included in the above averages, the quality of the Company's supply having been deteriorated so considerably for 2 or 3 days by the influx of flood-water into one of the wells as to materially affect the averages for the whole year.

The 10 bacteriological analyses made during the year gave an average of 231 organisms per cubic centimeter, with a maximum of 589 in June, and a minimum of 12 in July. The proportion of liquifying to non-liquifying organisms was as is 1 to 17.

In no case was the *bacterium coli* or other organisms suggestive of any kind of contamination found.

The samples were taken : 1 from Station Cottages, 6 from Fosse Road, 1 from Bordyke, 2 from the Castle, and 1 from the Angel Hotel.

Scavenging.

This work continues to be carried out by the Council's own men, under the direction of the Surveyor, and this is doubtlessly the most satisfactory arrangement, but on account of the growth of the town the employment of more carts and men may be required in the summer.

The burning of the rubbish in the open on the Sewage Farm land is still carried out. The fumes are at times, when the wind is in certain directions, complained of, and it is hoped that the promised Destructor may be provided at no distant date.

Sewage Farm.

The small experimental contact bed has been so far satisfactory that two others are being made on the site of the old sludge bed.

The new tanks at the highest point of the Farm are completed, and appear to have been well made, and the cement has stood the weather well. The sewage from this high point can be directed to any part of the Farm.

Mr. Bradley's report of inspections and work carried out in his department is appended.

It will be noticed that the statistical tables at the end of this Report are somewhat different from those of former years. The four new tables have been issued by the Local Government Board in place of the two headed "A" and "B," which were until recently in use, with a view to facilitate record of a minimum amount of statistical information of the sort desired by the Board.

I have the honour to be, Gentlemen,

Your obedient Servant,

JAMES SCOTT TEW.

TABLE 1.

Tonbridge Urban District.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS.	Deaths of Residents Registered beyond District.	DEATHS AT ALL AGES. NETT.	
		Number.	Rate.*	Number.	Rate per 1,000 Births Registered.	Number.	Rate.*			Number.	Rate.*
1898.	10,739	281	26.1	36	128	133	12.3	23	23	156	14.5
1899.	10,839	301	27.7	36	116	155	14.3	13	13	168	15.4
Averages for years 1898-1899.	10,789	291	26.9	36	122	144	13.3	18	18	162	14.9
1900.	10,947	253	23.1	25	98	143	13.0	19	19	162	14.7

*Rates calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water)	1,200	Total population at all ages	10,117	At Census of 1891.
		Number of inhabited houses	1,988	
		Average number of persons per house . .	5	

TABLE 2.
Tonbridge Urban District.

YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1900	10,947	253	162	25

TABLE 3.
Tonbridge Urban District.

Cases of Infectious Disease notified during the Year 1900.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							No. OF CASES REMOVED TO HOSPITAL.
	At all Ages.	At Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards	
Small-pox . . . . .	..	..	..	..	..	..	..	..
Cholera . . . . .	..	..	..	.	..	..	..	..
Diphtheria	3	..	..	1	1	1	..	..
Membranous Croup . .	..	..	..	..	..	..	..	..
Erysipelas	10	..	..	..	2	6	2	..
Scarlet Fever	19	..	..	17	2	..	..	14
Typhus Fever . . . . .	..	..	..	..	..	.	..	..
Enteric Fever	8	..	..	1	3	4	..	1
Relapsing Fever . . . .	..	..	..	..	..	..	.	..
Continued Fever . . . .	..	..	.	..	..	.	..	..
Puerperal Fever . . . .	..	..	..	..	..	..	..	..
Plague . . . . .	..	..	..	..	..	..	..	.
Totals	40	..	..	19	8	11	2	15

TABLE 4.

Tonbridge Urban District.

Causes of, and Ages at, Death during Year 1900.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN PUBLIC INSTITU- TIONS.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	
Small-pox .....	..	..	..	..	..	..	..	..
Measles	3	1	2	..	..	..	..	..
Scarlet Fever .....	..	..	..	..	..	..	..	..
Whooping-cough	1	1	..	..	..	..	..	..
Diphtheria and Mem- braneous Croup ..	..	..	..	..	..	..	..	..
Croup .....	..	..	..	..	..	..	..	..
Fever { Typhus .....	..	..	..	..	..	..	..	..
{ Enteric .....	..	..	..	..	..	..	..	..
{ Other continued ..	..	..	..	..	..	..	..	..
Epidemic Influenza ..	4	..	..	2	1	1	..	1
Cholera .....	..	..	..	..	..	..	..	..
Plague .....	..	..	..	..	..	..	..	..
Diarrhoea . . . . .	..	..	..	..	..	..	..	..
Enteritis	2	2	..	..	..	..	..	..
Puerperal Fever .....	..	..	..	..	..	..	..	..
Erysipelas	1	..	..	..	..	..	1	..
Other Septic Diseases ..	..	..	..	..	..	..	..	..
Phthisis	14	1	2	..	3	7	1	2
Other Tubercular Di- seases	8	2	4	..	..	2	..	..
Cancer, Malignant Di- sease	12	..	..	..	..	8	4	..
Bronchitis	23	7	7	1	..	2	6	..
Pneumonia	6	1	2	..	1	2	..	1
Pleurisy	1	..	..	..	..	1	..	..
Other Diseases of Res- piratory Organs ..	..	..	..	..	..	..	..	..
Alcoholism .....	..	..	..	..	..	..	..	..
Cirrhosis of Liver } ..	..	..	..	..	..	..	..	..
Venereal Diseases .....	..	..	..	..	..	..	..	..
Premature Birth	4	4	..	..	..	..	..	..
Diseases & Accidents of Parturition .....	..	..	..	..	..	..	..	..
Heart Diseases	23	..	..	2	4	9	8	6
Accidents	9	..	1	4	1	2	1	..
Suicides .....	..	..	..	..	..	..	..	..
All other Causes	51	6	2	2	10	9	22	9
All Causes	162	25	20	11	20	43	43	19

REPORT & SCHEDULE of Sanitary Work carried out by the Sanitary Inspector during the year 1900.

The Common Lodging-houses have been inspected, and appear to be clean and well conducted. Only two houses are now registered for this purpose, the Swan having ceased to be a lodging-house.

Cowsheds, Dairies, and Slaughter-houses have been periodically inspected, and found to be in a cleanly condition. Three registrations have been made during the year.

The work in connection with the prevention of Infectious Disease has again been light. It necessitated 38 visits to infected houses, the removal of 15 cases to the Hospital, and the disinfecting of a number of rooms and a small quantity of bedding and clothing.

It has not been necessary to resort to legal proceedings during the year.

The Canal Boats have been inspected as usual during the past year, and a copy of the Annual Report sent to the Local Government Board.

The following is the Schedule of Work done during the year :—

Notices served (on complaint or otherwise)	39
New W.C.'s, cisterns provided, house drains ventilated, repaired, and unstopped, sink waste taken outside and disconnected, and bell traps replaced by gullies	40
Houses completely re-drained and disconnected from the Sewer	40
Dust-bins provided	6
Nuisances caused by keeping animals abated	2
Accumulation of filth or manure removed by notice	2

WM. LAURENCE BRADLEY,

Mem. San. Inst.